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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,415	12/18/2001	Akiko Shirai	040425-0152	9574
22428	7590	10/21/2004		
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER STORK, KYLE R	
			ART UNIT 2178	PAPER NUMBER

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/020,415	Applicant(s) SHIRAI, AKIKO	
	Examiner Kyle R Stork	Art Unit 2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/020,415.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>18.12.01, 09.09.04</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is in response to the application filed 18 December 2001, and the Information Disclosure Statements filed 18 December 2001 and 9 September 2004.
2. Claims 1-18 are pending. Claims 1-3, 7-9, and 13-15 are independent claims.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Section 2100 of the MPEP states:

b) Nonfunctional Descriptive Material

Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. 101. Thus, Office personnel should consider the claimed invention as a whole to determine whether the necessary functional interrelationship is provided.

Where certain types of descriptive material, such as music, literature, art, photographs and mere arrangements or compilations of facts or data, are merely stored so as to be read or outputted by a computer without creating any functional interrelationship, either as part of the stored data or as part of the computing processes performed by the computer, then such descriptive material alone does not impart functionality either to the data as so structured, or to the computer. Such "descriptive material" is not a process, machine, manufacture or composition of matter. (Data consists of facts, which become information when they are seen in context and convey meaning to people. Computers process data without any understanding of what that data represents. Computer

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Dictionary 210 (Microsoft Press, 2d ed. 1994).)

The policy that precludes the patenting of nonfunctional descriptive material would be easily frustrated if the same descriptive material could be patented when claimed as an article of manufacture. For example, music is commonly sold to consumers in the format of a compact disc. In such cases, the known compact disc acts as nothing more than a carrier for nonfunctional descriptive material. The purely nonfunctional descriptive material cannot alone provide the practical application for the manufacture. Office personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

As per claims 13-15, "a recording medium on which a program is recorded" is not directed to statutory subject matter. The claims therefore fail to meet the requirements of U.S.C. 101, and are subsequently rejected.

All claims not addressed above are rejected based upon their dependency on rejected claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro et al. (JP 6-162104, 1994) in further view of Junichi (JP 2-41566, 1990).

As per independent claim 1, Yoshihiro discloses the document filing system comprising:

- (a) Image input means for inputting page image information of a document
(Abstract, Constitution)
- (b) Graphic pattern extraction means for extracting a graphic pattern area from the page image information input by said image input means (Abstract, Constitution)
- (c) Graphic pattern layout classification means for classifying the graphic pattern area extracted by said graphic pattern extraction means on the basis of layout classification criteria defined in advance (Abstract, Constitution)
- (e) Command input means for giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet (Abstract, Constitution: Here, in order for the elements to be retrieved, a user must enter commands specifying what is to be retrieved.)
- (g) Image display means for displaying the page image information searched out by said search processing means (Abstract, Constitution)

Yoshihiro fails to specifically disclose:

- (d) Information storing means for storing a layout classification classified by said graphic pattern layout classification means upon linking the layout classification to the page image information input by said image input means
- (f) Search processing means for classifying the rectangle in the frame on the paper sheet, which is designated by said command input means, on the basis of

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the layout classification criteria, and searching for page image information stored upon being linked to the same layout classification

However, Junichi discloses:

- (d) Information storing means for storing a layout classification classified by said graphic pattern layout classification means upon linking the layout classification to the page image information input by said image input means (Abstract, Constitution)
- (f) Search processing means for classifying the rectangle in the frame on the paper sheet, which is designated by said command input means, on the basis of the layout classification criteria, and searching for page image information stored upon being linked to the same layout classification (Abstract, Constitution)

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Yoshihiro's system of extracting a graphical pattern with Junichi's system of storing and searching graphical patterns, since it would have allowed a user to extract, store, and search a pattern through a single interface.

As per independent claim 7, the applicant recites the method similar to the system disclosed in claim 1. Therefore, claim 7 is similarly rejected under Yoshihiro and Junichi.

As per independent claim 13, the applicant recites the computer program similar to the system disclosed in claim 1. Therefore, claim 13 is similarly rejected under Yoshihiro and Junichi.

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7. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro and Junichi in further view of Yoshiaki et al. (JP 06-348758, 1994).

As per independent claim 2, Yoshihiro and Junichi disclose the limitations similar to claim 1 (a) – (g).

- (a) Maps to claim 1 (a)
- (b) Maps to claim 1 (b)
- (c) Maps to claim 1 (c)
- (f) Is substantially similar to claim 1 (d), and the combination of color and motivation to combine (f)-(h) is set forth below
- (g) Is substantially similar to claim 1 (e)
- (h) Is substantially similar to claim 1 (f)
- (i) Maps to claim 1 (g)

Yoshihiro and Junichi fail to disclose:

- (d) Color acquisition means for acquiring a representative color from the graphic pattern area extracted by said graphic pattern extraction means
- (e) Color classification means for classifying the color from said color acquisition means on the basis of color criteria in advance
- Color in (f)-(h)

Yoshiaki discloses:

- (d) Color acquisition means for acquiring a representative color from the graphic pattern area extracted by said graphic pattern extraction means (Abstract, constitution)

- (e) Color classification means for classifying the color from said color acquisition means on the basis of color criteria in advance (Abstract, constitution)
- Color in (f)-(h) (Abstract, constitution)

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Yoshihiro and Junichi's document filing system with Yoshiaki's system of using color for document filing, since it would have allowed a user to search for color coded documents more easily and quickly.

As per independent claim 8, the applicant recites the method similar to the system disclosed in claim 2. Therefore, claim 8 is similarly rejected under Yoshihiro, Junichi, and Yoshiaki.

As per independent claim 14, the applicant recites the computer program similar to the system disclosed in claim 2. Therefore, claim 14 is similarly rejected under Yoshihiro, Junichi, and Yoshiaki.

8. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro, Junichi, and Yoshiaki in further view of Seiji et al. (JP 07-141389).

As per independent claim 3, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to claim 2 (a) – (i).

- (a) Maps to claim 2 (a)
- (b) Maps to claim 2 (b)
- (c) Maps to claim 2 (c)
- (d) Maps to 2 (d)
- (e) Maps to 2 (e)

- (f) Maps to 2 (f)
- (g) Is substantially similar to claim 2 (g), and the use of layout information of a graphic pattern in the page image information as a rectangle in a frame on a sheet of paper and motivation for combination are detailed below
- (h) Is substantially similar to claim 2 (h), and the use of layout information of a graphic pattern in the page image information as a rectangle in a frame on a sheet of paper and motivation for combination are detailed below
- (i) Maps to 2 (i)
- (j) Maps to 2 (g)
- (k) Maps to 2 (h)
- (l) Maps to claim 2 (i)

Yoshihiro, Junichi, and Yoshiaki fail to disclose using layout information of a graphic pattern in the page image information as a rectangle in a frame on a sheet of paper. However, Seiji discloses layout information of a graphic pattern in the page image information as a rectangle in a frame on a sheet of paper (Figures 72-73 and 75 (a) and (b)).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Yoshihiro, Junichi, and Yoshiaki's document filing system with Seiji's system employing the use of layout information of a graphic pattern in the page image information as a rectangle in a frame on a sheet of paper, since it would have allowed a user to search for documents containing specific layout information more quickly.

As per independent claim 9, the applicant recites the method similar to the system disclosed in claim 3. Therefore, claim 9 is similarly rejected under Yoshihiro, Junichi, Yoshiaki, and Seiji.

As per independent claim 15, the applicant recites the computer program similar to the system disclosed in claim 3. Therefore, claim 15 is similarly rejected under Yoshihiro, Junichi, Yoshiaki, and Seiji.

9. Claim 4, 10, 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro and Junichi in further view of Windows® NT 4.0 (1996).

As per dependent claim 4, Yoshihiro and Junichi disclose the limitations similar to those in claim 1, and the same rejection is incorporated herein. Yoshihiro and Junichi fail to disclose the system further comprising means for selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information. Windows® NT discloses means for selecting a portrait/landscape orientation of the paper sheet (Figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have combined Yoshihiro and Junichi's system for searching with Windows® NT's method of selecting a paper orientation, since it would have allowed the user to specify another search criteria. This would protect the user from viewing documents in the alternative orientation.

As per independent claim 10, Yoshihiro and Junichi disclose the limitations similar to those in claim 7, and the same rejection is incorporated herein. The applicant

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further recites the method similar to the system disclosed in claim 4. Therefore, claim 10 is similarly rejected under Yoshihiro, Junichi, and Windows® NT.

As per independent claim 16, Yoshihiro and Junichi disclose the limitations similar to those in claim 13, and the same rejection is incorporated herein. The applicant further recites the computer program similar to the system disclosed in claim 4. Therefore, claim 16 is similarly rejected under Yoshihiro, Junichi, and Windows® NT.

10. Claim 5, 11, 17 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro, Junichi, and Yoshiaki in further view of Windows® NT 4.0 (1996).

As per independent claim 5, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to those in claim 2, and the same rejection is incorporated herein. The applicant further recites the system similar to the system disclosed in claim 4. Therefore, claim 5 is similarly rejected under Yoshihiro, Junichi, Yoshihiro and Windows® NT.

As per independent claim 11, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to those in claim 8, and the same rejection is incorporated herein. The applicant further recites the method similar to the system disclosed in claim 4. Therefore, claim 11 is similarly rejected under Yoshihiro, Junichi, Yoshihiro and Windows® NT.

As per independent claim 17, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to those in claim 14, and the same rejection is incorporated herein. The applicant further recites the computer program similar to the system disclosed in

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claim 4. Therefore, claim 17 is similarly rejected under Yoshihiro, Junichi, Yoshihiro and Windows® NT.

11. Claim 6, 12, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro, Junichi, Yoshiaki, and Seiji in further view of Windows® NT 4.0 (1996).

As per independent claim 6, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to those in claim 3, and the same rejection is incorporated herein. The applicant further recites the system similar to the system disclosed in claim 4. Therefore, claim 6 is similarly rejected under Yoshihiro, Junichi, Yoshihiro, Seiji, and Windows® NT.

As per independent claim 12, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to those in claim 9, and the same rejection is incorporated herein. The applicant further recites the method similar to the system disclosed in claim 4. Therefore, claim 12 is similarly rejected under Yoshihiro, Junichi, Yoshihiro, Seiji, and Windows® NT.

As per independent claim 18, Yoshihiro, Junichi, and Yoshiaki disclose the limitations similar to those in claim 15, and the same rejection is incorporated herein. The applicant further recites the computer program similar to the system disclosed in claim 4. Therefore, claim 18 is similarly rejected under Yoshihiro, Junichi, Yoshihiro, Seiji, and Windows® NT.

Conclusion

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12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US006751779B1 Kurosawa et al.: Discloses processing a document image.
- US006694053B1 Burns et al.: Discloses document structure analysis.
- US006636648B2 Loui et al.: Discloses alburning method with automatic page layout.
- US006596032B2 Nojima et al.: Discloses document processing, storing, and modification of data.
- US006562077B2 Bobrow et al.: Discloses sorting image segments into clusters.
- US006353840B2 Saito et al.: Discloses search template for extracting information.
- US005875265A Kasao: Discloses image analysis and editing.
- US006771813B1 Katsuyana: Discloses image processing and pattern extraction.
- US005781175A Hara: Discloses image search apparatus.
- US006157387A Kotani: Discloses image generation apparatus and method.
- US 2001/0042083 Saito et al.: Discloses user-defined search template for extracting information.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (7:00-3:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (703) 308-5465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kyle Stork
Patent Examiner
Art Unit 2178



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER